

Materials on the Theory of Rolling, Pt. 6

SOV/4420

9. Forward slip in rolling a thick strip (M.I. Boyarshinov, V.V. Mel'tser, 1956)	65
Ch. V. Pressure of the Work on Rolls	
1. Nomogram for determining pressure in cold rolling (O. Emicke, K.Lukas, 1944)	74
2. Verification of Ekalund's formula (E.Mogiljanskiy, 1946)	77
3. Ye.S.Rokotyan's formula for pressure of the work on rolls in cold rolling (1947)	79
4. Calculation of pressure in strip rolling (M.Cock, E.C. Larke, 1947)	86
5. The effect of cold rolling speed on unit pressure (H.Ford, 1947)	94
6. Unit pressure in hot rolling of alloyed steels (N.I. Svede - Shvets, T.G. Pegova, A.A. Protasov, 1948)	96
7. Theory of unit pressure distribution along the contact arc and calculation of rolling pressure (D.R. Bland, H.Ford 1948)	99
8. Forces acting during rolling in a four-high mill (M.M. Saf'yan, 1948)	106
9. Unit pressure distribution along the contact arc (V.P. Severdenko, 1949)	114
10. Effect of speed on deformation resistance (M.A. Leychenko, 1949)	119

Card 3/8

Materials on the Theory of Rolling, Pt. 6

SCV/4420

11. Effect of front and back tension on the deformation resistance of a thin steel band (W. Lueg, E. Greiner, 1949)	125
12. Roof-iron resistance to deformation (Ya.S. Gallay, 1949)	129
13. Nomogram for determining the pressure of work on rolls in cold rolling of low-carbon steel (M.A. Leychenko, 1950)	135
14. Effect of tension on pressure and torque in band rolling (E. Hill, 1950)	138
15. Unit pressure distribution in rolling between plane rolls and grooved rolls (V.P. Severdenko, 1950)	149
16. Method of approximate calculation of pressure in cold rolling with tension (H. Ford, F. Ellis, D.R. Bland, 1951)	159
17. Calculation of pressure on rolls in rolling with tension (W.C.F. Hessenberg, R.B. Sims, 1951)	165
18. Unit pressure distribution over the width of a strip (I.G. Astakhov, 1951)	168
19. Effect of tension on pressure of the work on rolls (I.G. Arutyunov )	179
20. Analysis of formulas for deformation resistance in rolling (Yu.M. Chizhikov, 1952)	193
21. Unit pressure distribution in an oval pass (V.P. Severdenko, 1952)	207

Card 4/8

## Materials on the Theory of Rolling, Pt. 6

SOV/4420

22. Unit pressures in I-beam rolling (V.P. Severdenko, 1952)	211
23. Elastic deformation of a mill caused by rolling pressure (W.C. Hessenberg, R.B. Sims, 1952)	215
24. Unit pressure distribution in cold and in hot rolling (C.L. Smith, F.H. Scott, W.Sylwestrowicz, 1952)	220
25. Deformation resistance of aluminum and duralumin in hot rolling (P.G. Kirillov, 1952)	227
26. Unit pressure in zinc hot rolling (I.L. Perlin, L.K. Makar'yev, 1952)	229
27. Influence of "outer ends" [as related to contact zone] of a strip on rolling pressure (I.M. Pavlov, I.K. Suvorov, 1953)	232
28. Pressure on rolls and conditions for cold rolling of a band (M.D. Stope, 1953)	235
29. Analysis of calculation methods of unit pressures in rolling (V.A. Tyagunov, 1953)	243
30. Unit pressure curves in cold rolling of steel (P.O. Strandell, A. Leufvèn, 1953)	256
31. Calculation of pressure in cold rolling of a copper and brass band (M. Cook, R.J. Parker, 1953)	262
32. Unit pressure distribution in hot rolling (G.S. Mikan, 1954)	276

Card 5/8

Materials on the Theory of Rolling, Pt. 6

SOV/4420

33.	Unit pressure distribution in large contact angles (I.L. Perlin, K.K. Goderzian, 1954)	291
34.	Calculation of pressure in cold rolling of steel (R.B. Sims, 1954)	300
35.	Pressure during rolling of low-carbon steel in a plate mill (R. Stewartson 1954)	311
36.	Calculation of pressure in hot rolling (R.B. Sims, 1954)	315
37.	Pressure on rolls, according to the hydrodynamic theory of rolling (A.Kneschke, 1954)	324
38.	True unit pressures in [rod] flattening (V.P. Severdenko, I.G. Astakhov, 1954)	331
39.	Influence of speed in rolling pressure (Y. Billigman, A. Pomp, 1954)	334
40.	Pressure in cold rolling with tension (A.I. Tselikov, A.V. Tret'yakov, 1954)	346
41.	Formula of unit pressure with consideration of the no-slip zone (A.A. Korolev, 1955)	351
42.	Pressure in cold rolling of sheets (M.M. Saf'yan, 1955)	374
43.	Methods for determining unit pressure in cold rolling (M.D. Stone, 1956)	379
44.	Influence of the deformation rate on the unit pressure in hot rolling of steel (T.M. Golubev, M.A. Zaykov, Ya. V. Shamets, 1956)	383

Card 6/8

Materials on the Theory of Rolling, Pt. 6

SOV/4420

45. Deformation resistance of alloyed steels (W.Lueg, H.G. Müller, 1956)	390
Ch. VI. Power Consumption in Rolling	
1. Nomogram for calculation of [required] power in cold rolling of steel (O. Emicke, K.Lukas, 1944)	401
2. Distribution of torque between rolls (E.A.W. Hoff, 1947)	406
3. Calculation of power of the drive in cold rolling (Ye.S. Rokotyan, 1947)	
4. Influence of speed on power consumption in cold rolling (H. Ford, 1947)	411
5. Influence of temperature on power consumption in rolling (V.P. Severdenko, 1951)	414
6. Influence of rolling speed on power consumption per ton of product (N.N. Druzhinin, S.P. Granovskiy, 1951)	417
7. Formula for power of rolling (B.P. Bakhtinov, 1952)	418
8. Determination of power consumption and torque in rolling (Yu.M. Faynberg, 1953)	420
9. Nomogram for determining torque in cold rolling of low-carbon steel (R.B. Sims, 1954)	431
	438

Card 7/8

## Materials on the Theory of Rolling, Pt. 6

SC7/4420

10. Rolling with one friction-driven roll (W.Lueg, K.H. Treptow, 1955)	
11. Determination of work in cold rolling (M.D. Stone, 1956)	444
12. Power consumption of wide strip mills (R.E. Marrs, 1956)	448
13. Power consumption diagram for heat and cold rolling (J.H. Taylor, 1956)	456
14. Work consumption per unit weight and per unit volume [of stock] in rolling alloyed steels (W.Lueg, H.G. Müller, 1956)	460
Bibliography	472
AVAILABLE: Library of Congress	478

Card 8/8

VK/rn/gmp

12-15-60

GALLAY

PHASE I BOOK EXPLOITATION SOV/3481

Materialy po teorii prokatki, Ch. 5 (Papers on the Theory of Rolling,  
Pt. 5) Moscow, Metallurgizdat, 1960. 608 p. Errata slip inserted.  
3,150 copies printed.

Compiler: Yakov Samoilovich Gallay, Docent; Ed.: Ig. M. Pavlov,  
Corresponding Member, Academy of Sciences USSR; Ed. of Publishing  
House: L. M. Gordon; Tech. Ed.: M. K. Attopovich.

PURPOSE: This book is intended for metallurgists, aspirants, and persons  
writing dissertations, for technical personnel in metallurgical plants,  
and may also be used by students in metallurgical higher-technical  
schools and teknikums.

COVERAGE: This is the fifth part of a six-part collection of papers  
covering theory and experimental investigations of rolling. The  
present volume is divided into three chapters and includes papers  
published in the Soviet Union and other countries during the period  
1946-1956. Papers in the first chapter deal with the effect of  
friction in rolling, the second chapter is concerned with the process  
of metal deformation, and the third with metal spread in rolling.

Card 1/16

GALLAY, Ya.S.; MERIIN, I.M.

Effect of the amount of reduction of a steel strip on roll flattening. Izv. vys. ucheb. zav.; chern. met. 4 no.10:59-65 '61.  
(MIRA 14:11)

1. Izhevskiy mekhanicheskiy institut.  
(Rolling (Metalwork)) (Rolls (Iron mills))

GALLAY, Ya.S., dotsent; IVONIN, B.A., inzh.; PLEINER, G.Ye., inzh.

Cleaning the surface of metal strip. Stal' 24 no.2:155-156 F '64.  
(MIRA 17:9)

1. Severo-Zapadnyy zaochnyy politekhnicheskiy institut i Leningradskiy  
staleprokatnyy zavod.

ALIMARIN, I.P.; GALLAY, Z.A.; SHEINA, N.M.; RODIONOVA, T.V.

Current-voltage characteristics of N-benzoylphenylhydroxylamine  
solutions. Izv.AN SSSR.Otd.khim.nauk no.3:567-569 Mr '63.

(MIRA 16:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova,  
(Benzohydroxamic acid) (Reduction, Electrolytic)

VINOGRADOVA, Ye.N.; GALLAY, Z.A.; FINOGENOVA, Z.M.; ALIMARIN,  
I.P., prof., otv. red.; KOROBTSOVA, N.A., red.; CHISTYAKOVA,  
K.S., tekhn. red.

[Methods of polarographic and amperometric analysis] Metody  
poliarograficheskogo i amperometricheskogo analiza. Moskva,  
Izd-vo Mosk. univ., 1963. 298 p. (MIRA 16:12)

1. Chlen-korrespondent AN SSSR (for Alimarin).  
(Polarography) (Conductometric analysis)

GALLAY, Z. A.

261T19

USSR/Chemistry - Nickel May/Jun 52

"Amperometric Titration of Nickel With Dioximes," V.M. Peshkova and Z.A. Gallay, Moscow State U

Zhur Anal Khim, Vol 7, No 3, pp 152-157

Dimethylglyoxime (I), Na-dimethylglyoxime (II), and dioximecyclohexanedione (III), can be used for the amperometric titration of Ni in the pure salts and in the presence of Fe<sup>3+</sup>, Al<sup>3+</sup>, Cr<sup>3</sup> and Zn<sup>2+</sup>. In titrating with (I), they recommend sodium acetate as a background. Titration can be conducted at room temp without the removal of O from soln. (III) is to be

261T19

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preferred to (I) and (II), since it permits the detection of Ni among large quantities of Al, Fe, Cr, and Zn<sup>2+</sup>. The great stability of nickel dioximecyclohexanedione in comparison with nickel-dimethylglyoxime was confirmed amperometrically.

FD-1145

GALLAY Z. A.  
USSR/Chemistry - Analytical

Card 1/1

Pub. 129-9/23

Author : Peshkova, V. M.; Gallay, Z. A.

Title : Amperometric methods for determining titanium

Periodical : Vest. Mosk. un., Ser. fizikomat. i yest. nauk, 9, No 7, 73-81, Oct 1954

Abstract : Cupferron was found to be a satisfactory reagent for the amperometric titration of titanium (IV) in pure salts and in the presence of Al, Ni, Zn, and Cr. Redox reactions can be utilized for the amperometric titrations by increasing the stability of the titanium solution. Ferric chloride was found to be the best oxidizing agent for determining titanium in steels. Nineteen references (eleven USSR).

Institution : Chair of Analytical Chemistry

Submitted : February 18, 1954

GALLAY, Z. A.

GALLAY, Z. A. -- "Determination of Alloying Elements in Steels and Alloys Using the Method of Amperometric Titration." Moscow State University M. V. Lomonosov. Chemistry Faculty. Moscow, 1955. (Dissertation for the Degree of Candidate in Chemical Sciences)

SO: Knizhnaya Letopis', № 1, 1956, pp 102-122, 124

137-58-2-4412

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 302 (USSR)

AUTHORS: Peshkova, V.M., Gallay, Z.A., Alekseyeva, N.N.

TITLE: Amperometric Determination of Molybdenum (Amperometricheskoye opredeleniye molibdена)

PERIODICAL: Khimiya redkikh elementov, Nr 3, 1957, pp 119-130

ABSTRACT: A rotating Pt electrode and a GINTsVETMET polarograph were used in the amperometric titration of  $\text{Mo}^{6+}$  with a  $\text{Cr}^{2+}$  solution. The  $\text{Cr}^{2+}$  oxidized at the Pt electrode, at +0.4 v, on a background of HCl and  $\text{H}_2\text{SO}_4$ ; this produced a diffusion current proportional to the concentration.  $\text{Mo}^{4+}$  and  $\text{Mo}^{5+}$  do not yield a diffusion current in such conditions. On a background of 4N HCl, the sensitivity threshold was 1.5 mg Mo in a 25-cc solution; on a 4N  $\text{H}_2\text{SO}_4$  background the threshold was 0.5 mg Mo in a 25-cc solution. In the anode region  $\text{Mn}^{2+}$ ,  $\text{Zn}^{2+}$ ,  $\text{Al}^{3+}$ ,  $\text{Cr}^{3+}$ , and  $\text{Ni}^{2+}$  did not exhibit a polarographic wave, and the  $\text{Ti}^{4+}$  was titrated with a  $\text{Cr}^{3+}$  solution;  $\text{Mo}^{6+}$ , however, was titrated first, because  $E_{\text{Mo}^{6+}/\text{Mo}^{5+}} = +0.51$  volts, and  $E_{\text{Ti}^{4+}/\text{Ti}^{3+}} = -0.04$  volts. Mo could be titrated in the presence of  $\text{Ti}^{4+}$  up to an Mo/

Card 1/2

137-58-2-4412

**Amperometric Determination of Molybdenum**

Ti ratio of 1:3; when glacial acetic acid was present, it could be titrated up to a ratio of 1:4. When oxalic acid or  $H_3PO_4$  was present, Mo could be titrated in the presence of W up to an Mo/W ratio of 1:15 (within an error of 0.03 mg). In the absence of Mo, W could be titrated with a  $Cr^{2+}$  solution on a background of 7N HCl. When  $Fe^{3+}$  was present, two titrations were necessary: one at 0 volts to determine the  $Fe^{3+}$ , and one at +0.5 volts to determine the sum of  $Fe^{3+} + Mo^{6+}$ . The most suitable range of Mo/Fe ratios was that from 1:5 to 1:10 (the error being 0.1%). Larger Fe contents were determined by chromatography. Cu had a catalytic effect on  $Mo^{6+}$  and  $Fe^{3+}$  systems, and in its presence the latter elements could be titrated simultaneously at +0.5 volts. Cu exhibited a similar effect on  $W^{6+}$  and  $Cr^{2+}$  systems. This method is used to determine the Mo in Fe-Mo and in steels.

N.G.

**1. Molybdenum—Amperometric—Determination**

Card 2/2

GALLAY, Z-A.

## JOURNAL OF ANALYTICAL CHEMISTRY

Vol III, Nr 4, 1957

9

## USE OF ASCORBIC ACID IN AMPEROMETRIC TITRATION

COMMUNICATION I. DETERMINATION OF VANADIUM AND CERIUM IN THE PRESENCE  
OF OTHER ELEMENTS

E. A. Geller, V. G. Tiplyash and V. M. Perel'man

M. V. Lomonosov Moscow State University

Ascorbic acid is oxidized on a rotating platinum electrode. The half-wave potential depending on the acidity of the solution and on the concentration of a reagent. The equality  $I_{1/2} = KC$  is true up to the concentration of solutions being  $10^{-3}$  N.

Ascorbic acid solution, stabilized with complexones III and citric acid, may be successfully applied as a reagent in amperometric titration with the use of oxidation-reduction reactions.

Ascorbic acid may be used for the determination of vanadium in pure salts and in the presence of nickel, manganese, zinc, aluminum, chromium, titanium, as well as iron, molybdenum and tungsten.

A method has been developed for the determination of cerium in pure salts, and conditions have been found out for the amperometric determination of tetravalent cerium and trivalent iron with ascorbic acid.

27

JM from GMS

AUTHORS: Gallay, Z.A., Tiptsova, V.G., and Peshkova, V.M. SOV/55-58-1-28/33

TITLE: The Application of the Ascorbic Acid in the Amperometric Titration.  
Communication 2. Determination of Iodine, Hypochlorites and Iodates  
(Primeneniye askorbinskoj kisloty v amperometricheskem titrovani.  
Soobshcheniye 2. Opredeleniye yoda, gipokhloritov i yodatov)

PERIODICAL: Vestnik Moskovskogo universiteta, Seriya fiziko-matematicheskikh i  
yestestvennykh nauk, 1958, Nr 1, pp 209-213 (USSR)

ABSTRACT: It was asserted that the ascorbic acid can be applied successfully  
as a reagent mean in the analytic chemistry, e.g. for the  
determination of copper and active chlorine in a iodometric manner,  
or of hypo-chlorites by a direct titration with ascorbic acid. Lead  
and silver can be shown by titration of the excess of the  
potassium iodate.

There are 5 Soviet references.

ASSOCIATION: Kafedra analiticheskoy khimii (Chair of Analytic Chemistry)

SUBMITTED: September 20, 1956 Zh A Kh  
July 11, 1957 VMU

Card 1/1

AUTHOR:

Gallay, Z. A.

SOV/156-58-3-23/52

TITLE:

Consecutive Amperometric Determinations of Permanganate and Molybdate, Bichromate and Molybdate by Means of Divalent Chromium (Posledovatelnaya amperometricheskoye opredeleniye permanganata i molibdata, bikromata i molibdata dvukhvalentnym khromom)

PERIODICAL:

Nauchnyye doklady vyschey shkoly, Khimiya i khimicheskaya tekhnologiya, 1956, Nr 3, pp. 498-501 (USSR)

ABSTRACT:

The amperometric determination by the titration of molybdate and permanganate, bichromate and molybdate with divalent chromium is described. In the determination of hexavalent molybdenum and heptavalent manganese it turned out that in the oxidation of Cr<sup>2+</sup> the amount of current is proportional to the concentration. At the end point the current = 0. By employing the amperometric method a simultaneous determination of heptavalent manganese and hexavalent molybdenum is possible without their previous separation. The determination of hexavalent chromium and hexavalent molybdenum by means of the amperometric method using chromium-(II)-salts is carried out at a potential of 0-0,35 V. The results of the ampero-

Card 1/2

sov/ 156-58-3-23/52

Consecutive Amperometric Determinations of Permanganate and Molybdate,  
Bichromate and Molybdate by Means of Divalent Chromium

metrie titrations are satisfactory. The deviations for chromium amount to 0,1-0,2% and for molybdenum to 0 ± 0,02%. The titrations of chromium-molybdenum mixtures yield more accurate results. There are 4 figures, 3 tables, and 3 references, all of them are Soviet.

ASSOCIATION:

Kafedra khimicheskoy khimii Moskovskogo  
gosudarstvennogo universiteta im. M. V. Lomonosova  
(Chair of analytical Chemistry at Moscow State University  
named M. V. Lomonosov)

SUBMITTED:

January 10, 1958

Card 2/2

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PHASE I BOOK EXPLOITATION

SOV/5384

Vinogradova, Yevgeniya Nikolayevna, Zoya Aleksandrovna Gallay, and  
Zoya Mikhaylovna Finogenova.

Metody polyarograficheskogo i amperometricheskogo analiza (Methods  
of Polarographic and Amperometric Analysis) [Moscow] Izd-vo  
Moskovskogo univ., 1960. 279 p. Errata slip inserted. 1,000 copies  
printed.

Resp. Ed.: I. P. Alimarin, Corresponding Member, Academy of Sciences, USSR,  
Professor; Ed.: S. F. Kondrashkova; Tech. Ed.: G. I. Georgiyeva.

PURPOSE: This textbook is intended for students specializing in analytical  
chemistry at schools of higher education and for scientific personnel of  
research institutes and industrial laboratories.

COVERAGE: The book presents the general theoretical principles of

Card 1/14

Methods of Polarographic (Cont.)

SOV/5384

polarography and amperometric titration by means of mercury as well as solid electrodes. Methods of using mercury-drop and solid electrodes are listed and the prospects of polarographic analysis development are discussed. The concluding chapter deals with practical operations. All the problems are accurately and repeatedly checked during the practical training of students and were selected either to illustrate the theoretical course or to familiarize the student with methods of polarographic and amperometric analysis. Chs. I-VI were written by Ye. N. Vinogradova; Chs. VII and VIII by Z. A. Gallay; and Chs. IX and X by Ye. N. Vinogradova, Z. A. Gallay, and Z. M. Finogenova. The authors thank I. P. Alimarin, S. V. Gorbachev, A. I. Eusev, and A. Kh. Bork, Professors, for their help. References accompany each chapter. There are a total of 292 references: 162 Soviet, 68 English, 16 German 30 Czech, 9 French, 3 Swiss, 2 Polish, 1 Italian and 1 other.

Card 2/4

88583

21.3000

S/075/61/016/001/012/019  
B013/B055

AUTHORS: Gallay, Z. A. and Kalenchuk, G. Ye.

TITLE: Amperometric Titration of Uranium(VI) in Chromium(II) Salts

PERIODICAL: Zhurnal analiticheskoy khimii, 1961, Vol. 16, No. 1,  
pp. 63-67

TEXT: The present publication describes a procedure for the direct amperometric titration of uranium(VI) in pure chromium(II) salt solutions using a rotating and a vibrating platinum micro-electrode. The measurements were carried out in a BN-5 (VP-5) "Geopriborstsvetmet" direct-reading polarograph. The current was measured by means of a M-21 (M-21) mirror galvanometer with a maximum sensitivity of  $2.4 \cdot 10^{-9}$  a/mm/m. The reduction of uranium(VI) at the platinum electrode was performed under nitrogen using 0.5 N  $K_2SO_4$ , an acetate buffer of pH 3.9, as well as 0.5 N  $(NH_4)_2CO_3$  as background. The current-voltage curves (Fig. 1) show that 0.5 N  $K_2SO_4$  is the most suitable background for uranium(VI) reduction. The use of the cathode current of the reduction is very limited since the composition of

Card 1/3

Amperometric Titration of Uranium(VI) in  
Chromium(II) Salts

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S/075/61/016/001/012/019  
B013/B055

X

the background must remain constant. Uranium(IV) compounds were obtained by reduction of uranyl-sulfate solutions in a cadmium reducer or with  $\text{CrCl}_2$ , the quantity of the latter being such that 60 - 70% of the uranium was reduced. The current-voltage curves obtained are represented in Fig. 2. Direct proportionality between the diffusion current and the uranium concentration was only observed when the pH 3.9 acetate buffer was used as background. At room temperature uranium(VI) reacts rapidly with chromium(II). The acid concentration has a great influence on the analytical precision. The curves obtained by titration against a background of 1 - 6 N hydrochloric acid had a somewhat unusual shape (Fig. 3, curve 1) but the results were satisfactory (Table 1). The titration curves obtained with sulfuric acid as background had the conventional shape (Fig. 3, curve 2) though the initial amperage was increased. To determine small quantities of uranium (0.6 - 0.3 mg) the titration was carried out in a 1.5-ml volume in a special electrolytic bath using a vibrating small platinum electrode. This method yielded satisfactory results with 2 - 6 N  $\text{H}_2\text{SO}_4$  (Table 2). Lead does not interfere up to a ratio of  $\text{U} : \text{Pb} = 1 : 50$ .

Card 2/3

88583

Amperometric Titration of Uranium(VI) in  
Chromium(II) Salts

S/075/61/016/001/012/019  
B013/B055

At higher lead concentrations  $PbCl_2$  and  $PbSO_4$  are precipitated. Zirconium and thorium at concentrations of 1000 times that of uranium do not interfere in its determination either. The results of uranium determinations in the presence of Pb, Zr and Th are listed in Table 3. The mean error of the determination is  $\pm 0.3\%$ . In the amperometric determination of uranium(VI) in the presence of iron(III) the latter is reduced by chromium(II) before the uranium(VI) (Fig. 3). The results were satisfactory up to a ratio of U : Fe = 1 : 50. Up to a ratio of U : Fe = 1 : 10 both elements could be determined from one titration curve (Fig. 3, curve 3). The results of the titrations are summarized in Table 4. The authors thank I. P. Alimarin for valuable advice. A. I. Busev, K. I. Rozental', and V. I. Veselovskiy are mentioned. There are 3 figures, 4 tables, and 15 references: 7 Soviet, 4 US; 1 Czechoslovakian, 1 British, 1 Dutch, and 1 Swiss.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: October 5, 1959

Card 3/3

29526  
S/075/61/016, 1, 1, 1, 1, 1  
B106/B147

55400

AUTHORS: Gallay, Z. A., and Sheina, N. M.

TITLE: Amperometric titration of vanadium and uranium by salt  
trivalent titanium

PERIODICAL: Zhurnal analiticheskoy khimii, v. 16, no. 6, 1961, 706-708

TEXT: The authors were the first to use compounds of trivalent titanium as reagents in amperometric titrations. It had been found earlier that trivalent titanium oxidized on a rotating platinum microelectrode in the potential range 0.4-0.9 v, with the diffusion current being proportional to the titanium concentration (Ref. 4: Peshkova V. M., Gallay Z. A., Vestnik MGU, ser. fiz., mat. i estestv. nauk, no. 10, 73 (1954)). Because of this valuable property and owing to the fact that trivalent titanium is a sufficiently strong reducing agent ( $E_o \text{ Ti}^{\text{IV}}/\text{Ti}^{\text{III}} = -0.04 \text{ v}$ ) it can be used for titrimetric determination of hexavalent uranium

( $E_o \text{ UO}_2^{2+}/\text{U}^{\text{IV}} = +0.407 \text{ v}$ ), tetravalent and pentavalent vanadium in pure salts and in the presence of tetravalent titanium. The experiments were

Card 1/4

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S/075/61/016/006/003/006  
B106/B147

Amperometric titration of ...

made in a visual polarograph with an M-21 (M-21) galvanometer (maximum sensitivity  $2.4 \cdot 10^{-9}$  a/mm/m). A rotating platinum microelectrode of 5 mm length was used as indicator electrode, and a saturated calomel electrode as reference electrode. The reagent solution was obtained by adequate dilution of a 15%  $TiCl_3$  solution with HCl (1 : 1) or 4 N  $H_2SO_4$ ; X

it can be stored for 3 weeks in dark glass vessels. All experiments were made in purified nitrogen atmosphere. The concentration of the reagent solution was ascertained by potentiometric or amperometric titration with a standard solution of potassium bichromate. When  $\geq 0.5$  N sulfuric acid is used as a medium, pentavalent vanadium is quantitatively reduced to trivalent vanadium by trivalent titanium. In a 0.1 M sodium tartrate solution (pH 5.9) as a medium, vanadium is only reduced to tetravalent vanadium. Solutions of compounds of trivalent titanium can be used as a medium for the amperometric titration of tetravalent vanadium both in pure salts and in the presence of considerable amounts of Cr(III), Mn(II), and  $Ti(IV)$  in 10 N  $H_2SO_4$  (Table 1). Hexavalent uranium is only slowly reduced

by trivalent titanium. Reduction is accelerated by addition of pyrophosphoric acid or low amounts of  $SnCl_2$ . Ye. R. Nikolayeva and Yu. M.

Card 2/4

29526

S/075/61/016/006/003/006

B106/B147

Amperometric titration of ...

Shchekochikhin discovered that addition of pyrophosphoric acid increased the value of  $E_{U(VI)/U(IV)}$  from 0.4 to 0.6. Furthermore, pyrophosphoric acid forms a complex compound with tetravalent titanium and, thus, lowers the redox potential of the system  $Ti(IV)/Ti(III)$ . Addition of 0.2-0.3 milliliters of 50%  $H_4P_2O_7$  in 1 N  $H_2SO_4$  as a medium made it possible to conduct amperometric titration at  $E = 0.8$  v. The error of determination of 3-10 mg of U does not exceed 1.3%. Thus, uranium can be quantitatively determined in the presence of considerable amounts of tetravalent titanium (up to a ratio  $U : Ti = 1 : 100$ ) in 1 N  $H_2SO_4$  as a medium if the solution to be titrated contains 1 milliliter of 50% pyrophosphoric acid per 10 milliliters of solution. Deflection of the galvanometer is registered 30 seconds after addition of the reagent solution. There are 1 figure, 2 tables, and 7 references: 5 Soviet and 2 non-Soviet. The reference to the English-language publication reads as follows: Henrixon W. S., J. Am. Chem. Soc., 45, 2013 (1923). X

Card 3/4

29526

S/075/61/016/006/003/006  
B106/B147

Amperometric titration of ...

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V.  
Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: October 8, 1960

Table 1. Determination of vanadium in the presence of foreign elements in  $10 \text{ N H}_2\text{SO}_4$  as a medium.

Legend: (1) foreign elements, mg; (2) V, mg; (3) taken; (4) found;  
(5) error, %.

Посторонние элементы, мг (1)	(2) V, мг		Ошибка, % (5)	Посторонние элементы (1)	(2) V, мг		Ошибка, % (5)
	взято (3)	определен (4)			взято (3)	определен (4)	
—	0,46	0,45	-2,0	Tl <sup>IV</sup> —100	0,68	0,03	-7,0
Cr <sup>6+</sup> —10	1,39	1,38	-0,7	Tl <sup>IV</sup> 60	2,00	2,00	3,0
—100	0,92	0,91	-1,0	—60	1,00	1,02	2,0
Mn <sup>2+</sup> 50	0,92	0,89	-3,0	—104	1,00	1,04	4,0
	0,68	0,67	-1,4				

Card 4/4

GALLAY, Z.A.; ALIMARIN, I. P.; SHEINA, N.M.

Voltammetric study of benzohydroxamic acid solutions. Izv. AN  
SSSR. Ser. khim. no.11:2050-2051 N '63. (MIRA 17:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

GALLAY, Z.A.; MAR'YANOVSKAYA, T.Ya.

Current-voltage study of divalent vanadium compounds and their use  
in the amperometric titration of tetravalent vanadium and titanium.  
Zhur.anal.khim. 18 no.8:924-929 Ag '63. (MIRA 16:12)

1. Moscow State University.

GALLAY, Z.A.; ALIMARIN, I.P.; SHEINA, N.M.

Use of N-benzoylphenylhydroxylamine for the amperometric titration  
of titanium, zirconium, gallium, and scandium. Zhur. anal.khim. 18  
no.12:1442-1446 D '63. (MIRA 17:4)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GALLAY, Z.A.; ALIMARIN, I.P.; SHEINA, N.N.; MOROZOVA, L.A.

Amperometric titration of titanium and zirconium with a solution  
of neocupferron. Zhur. anal. khim. 19 no.12:1464-1467 '64  
(MIRA 18:1)

1. M.V. Lomonosov Moscow State University.

GALLAY, Z.A.; SHEINA, N.M.; ALIMARIN, I.P.

Amperometric determination of gallium in gallium arsenide and  
phosphide. Zhur. anal. khim. 20 no.10:1093-1096 '65.

I. M.V. Lomonosov Moscow State University. (MIRA 18:11)

L 14686-66 EWP(e)/EWT(m)/ETC(f)/ENG(m)/T/EWP(t) IJP(c) L, vD, SH  
ACC NR: AP6005881 (A) SOURCE CODE: UR/0075/65/020/010/093/1096

AUTHOR: Gallay, Z. A.; Sheina, N. M.; Alimarin, I. P.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Amperometric determination of gallium in gallium arsenide and phosphide

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 10, 1965, 1093-1096

TOPIC TAGS: gallium arsenide, phosphide, amperometric titration, gallium, arsenic, graphite microelectrode, electrolyte, volt-ampere characteristic

ABSTRACT: The applicability of the amperometric method to the determination of GaAs and GaP in samples of minimum possible weight was studied using a rotating graphite microelectrode and the reagent N-benzoylphenylhydroxylamine (N-BPFA) for the amperometric titration of gallium. A preliminary study of the volt-ampere characteristics of N-BPFA on a graphite electrode was made; oxidation waves of N-BPFA were obtained, and the dependence of  $E_{1/2}$  on the hydrogen ion concentration was determined. For acid background electrolytes, the diffusion current was found to be proportional to

Card 1/2

UDC: 543.24

L 14686-66  
ACC NR: AP6005881

concentrations up to  $1 \cdot 10^{-3}$  M N-BPHA, and the oxidation current of N-BPHA was found to be much more stable on a graphite electrode than on a platinum electrode. Gallium was determined by means of the oxidation current of N-BPHA at pH 3 by amperometric titration in the presence of arsenic (III), at a graphite electrode potential of 1.1 V. The accuracy of the determination is high up to a Ga/As ratio of 1/1.5. Arsenic (III) was determined in the presence of gallium by amperometric titration with potassium bromate. In the case of the semiconductor GaP, gallium was determined with sufficient accuracy up to a Ga/P ratio of 1/1.5. Orig. art. has: 1 figure, 5 tables.

SUB CODE: 07/ SUBM DATE: 27Oct64/ ORIG REF: 004/ OTH REF: 000

Card 2/2

L 37829-66

ACC NR: AP6028489

SOURCE CODE: HU/0018/65/017/006/0596/0600

1  
2

AUTHOR: Gallyas, Ferenc--Gayash, F.; Merei, F. Tibor

ORG: Neurological and Psychiatric Clinic, Medical University of Pecs (Pecsi Orvostudomanyi Egyetem, Ideg- es Elmeklinika)

TITLE: Procedure for the serial withdrawal of 10-200 microliter volumes of blood samples from small laboratory animals

SOURCE: Kiserletes orvostudomany, v. 17, no. 6, 1965, 596-600

TOPIC TAGS: experiment animal, blood, hematology

ABSTRACT: A procedure is described which can be used for the serial withdrawal of 10-200  $\mu$ l volumes of blood samples without unnecessary loss or mixing of the blood in order to follow the processes which take place in the blood of small laboratory animals within a few minutes or hours. The mixing between samples is less than 0.5 per cent and the volume difference between individual blood samples is less than 1 per cent. Orig. art. has: 5 figures. [JPRS: 34,161]

SUB CODE: 06 / SUBM DATE: 25Jan65 / OTH REF: 002

Card 1/1 MRP

077 2851

KAPLUN, Fayvel' Shmylovich; GALLE, Aron Grigor'yevich; MAKAROV, Anatoliy Matveyevich; NOZDRIN, Aleksandr Andreyevich; PLATOV, V.G., inzh., retsentent; PAVLOV, V.V., inzh., retsentent; TKACHENKO, A.A., inzh., red.; KHITROV, P.A., tekhn. red.

[Manual on containers and packing for freight] Spravochnik po tare i upakovke gruzov. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniya, 1961. 393 p. (MIRA 14:8)  
(Packing for shipment—Standards) (Railroads—Freight)

Moskva, Transzheledorizdat, 1961 (MIRA 15:7)

LANGUROV, I.Z., kand. tekhn.nauk; ZAVADSKIY, K.I., inzh.; GALLE,  
A.G., inzh., retsenzent; KRICH, B.V., inzh., retsenzent;  
PANKOV, A.M., inzh., retsenzent; SHISHLYKOV, Ye.S., inzh.,  
red.; USENKO, L.A., tekhn. red.

[Organization of the transportation of bulk liquid cargo]  
Organizatsiya perevozok nalivnykh gruzov. Moskva, Transzhele-  
dorizdat, 1963. 269 p. (MIRA 16:4)  
(Tank cars) (Railroads--Freight)

GALLE, Laszlo (Szeged, Lenin korut 6)

Taxonomy of *Physcia biziana* (Mass.) A.Zahlbr., a Mediterranean lichen, and its habitat in Hungary. Botan kozl 48 no.1/2:48-51 '59.

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R000614120012-4

GALLE, I. (Szeged)

Lichen societies in the Tisza-Maros angle. Acta bot Hung 6 no.1/2:  
15-33 '60.  
(Hungary--Lichens) (EEAI 10:3)

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R000614120012-4"

GALLE, Laszlo (Szeged, Lenin korut 6)

Lichens from the botanical collection of the late Lajos Timar.  
Botan kozl 48 no.3/4:239-244 '60.

GALLE László (Szeged, Lenin korut 6-8)

Newer data on the lichen flora of Koszthely and its vicinity.  
Botan kozl 49 no.1/2:84-94 '61.

GALLE, Laszlo

An account of the work of the Szeged Division of the Hungarian  
Biological Society, September 1960-April 1961. Biol kozl 10  
no.2:167-174 '62.

1. Magyar Biologial Tarsasag Szegedi Osztalyanak jegyzöje.

GALLE, Laszlo

The work of the Szeged Section of the Hungarian Biological Society. Biol kozl. 10 no.1:73-83 '62.

1. Magyar Biologial Tarsasag Szegedi Osztalyanak jegyzoje.

\*

GALLE, Laszlo (Szeged, Lenin korut 6-8)

Endocarpetum pusilli; a new lichen association on the loess-covered Mount Kopasz near Tokaj. Botan kozl Si no.2/3;81-85  
Ag '64.

GALLE, P. M.

Vize, V. Yu., and Galle, P. Kh., "Relationship between the Variations of the Force of the Northeastern Trade Wind in the Atlantic Ocean and Variations of Hydrological and Meteorological Phenomena in Europe(Abstract)," Izvestiya Tsentral'nogo Gidrometeorologicheskogo byuro(News of the Central Hydrometeorological Bureau) No III, 1924

SO: U-3039, 11 Mar 1953

GALLE, R.R.

Acute leukosis with localization of the hemopoietic focus in the  
mastoid process. Vest. oto-rin. 18 no.5:104-105 S-0 '56. (MIRA 9:11)

1. Iz klinicheskogo otdeleniya (zav. - prof. A.A. Atkarskaya) Nauchno-  
issledovatel'skogo instituta ukha, gorla i nosa Ministerstva zdravo-  
okhraneniya RSFSR (dir. - zasluzhennyj deyatel' nauki prof. V.I.  
Trutnev)

(LEUKEMIA, compl.  
mastoiditis, surg. of mastoid process)  
(MASTOIDITIS, etiol. and pathogen.  
leukemia, surg. of mastoid process)

KNUMYANTS, I.L., glav. red.; BAKHAROVSKIY, G.Ya., zam. glav. red.; BUSEV, A.I., red.; VARSHAVSKIY, Ya.M., red.; GEL'PERIN, N.I., red.; DOLIN, P.I., red.; KIREYEV, V.A., red.; MEYERSON, G.A., red.; MURIN, A.N., red.; POGODIN, S.A., red.; REBINDER, P.A., red.; SLONIMSKIY, G.S., red.; STEPANENKO, B.N., red.; EPSHTEN, D.A., red.; VASKEVICH, D.N., nauchnyy red.; GALLE, R.R., nauchnyy red.; GARKOVENKO, R.V., nauchnyy red.; GODIN, Z.I., nauchnyy red.; MOSTOVENKO, N.P., nauchnyy red.; LEBEDEVA, V.A., mladshiy red.; TRUKHANOVA, M.Ye., mladshiy red.; FILIPPOVA, K.V., mladshiy red.; ZHAROVA, Ye.I., red.; KULIDZHANOVA, I.D., tekhn. red.

[Concise chemical encyclopedia] Kratkaia khimicheskaiia entsiklopedia. Red. koll.: I.L.Knumiants i dr. Moskva, Gos. nauchn. izd-vo "Sovetskaiia entsiklopediia." Vol.1. A - E. 1961.  
1262 columns.

(MIRA 15:2)

(Chemistry—Dictionaries)

**Coals from the Tikhvibelskii and Tikharchenskii deposits.**  
 N. G. Titov and R. R. Gallo. *Akhie. Dostizh. Nauk* 9, 20-19 (1934).—The Tikhvibelskii coal, mined near Kuitais (Caucasus), is found in the following types: (1) clarain, a black shiny coal with narrow stripes; (2) coal with wide stripes of dull appearance contg. lenses of pitch, black, shiny vitrain; (3) coal composed mainly of a dense dull mass of greyish to dark gray color, contg. large lenses of vitrain; (4) a suprype type coal, very hard and tenacious; (5) vitrain. A complete chem. analysis of this coal is given. The Tikharchenskii deposit, located near Chemchirut (Caucasus), is high in ash. Analyses of samples drawn from prospect pits are given. A. A. B.

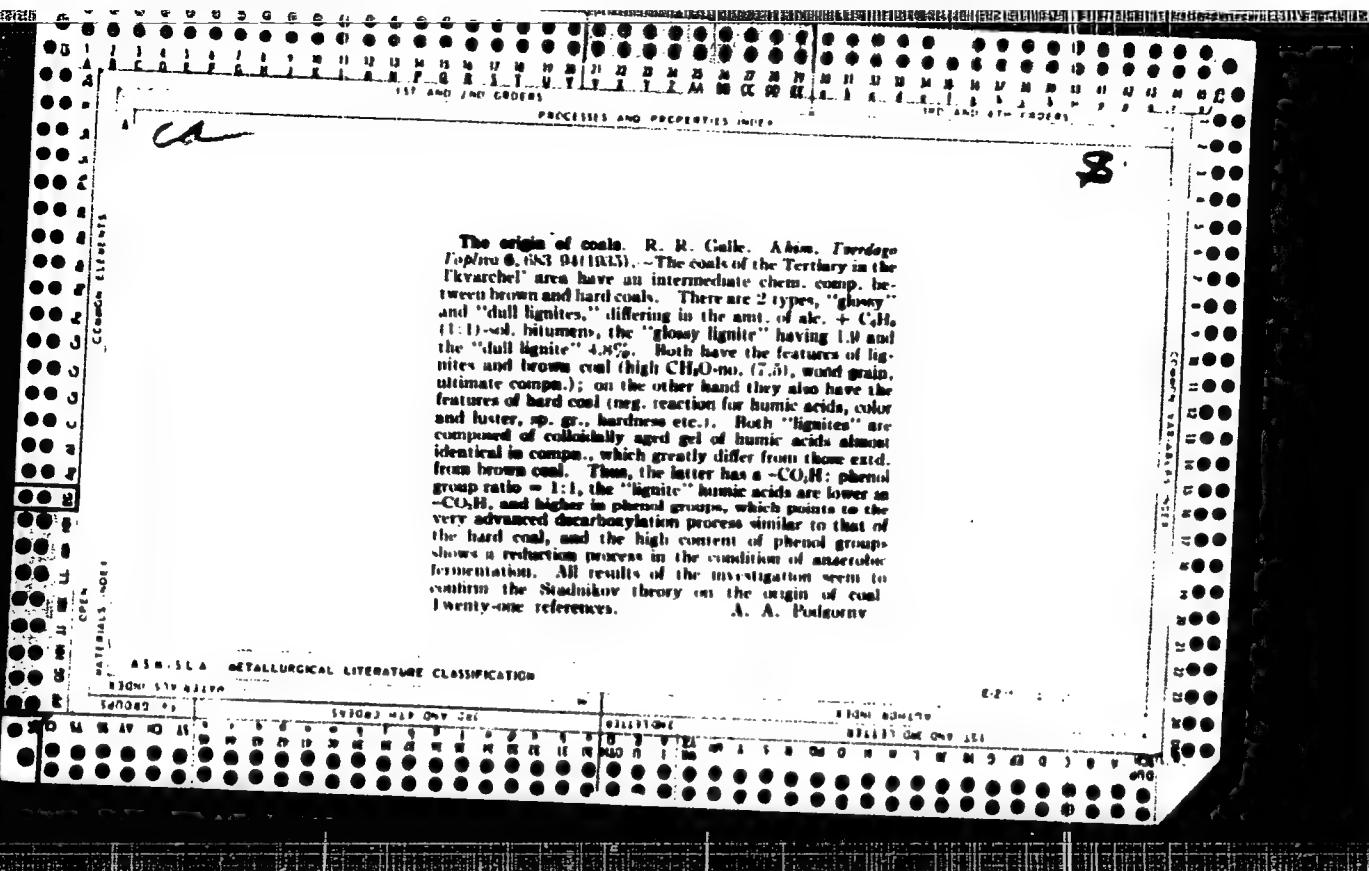
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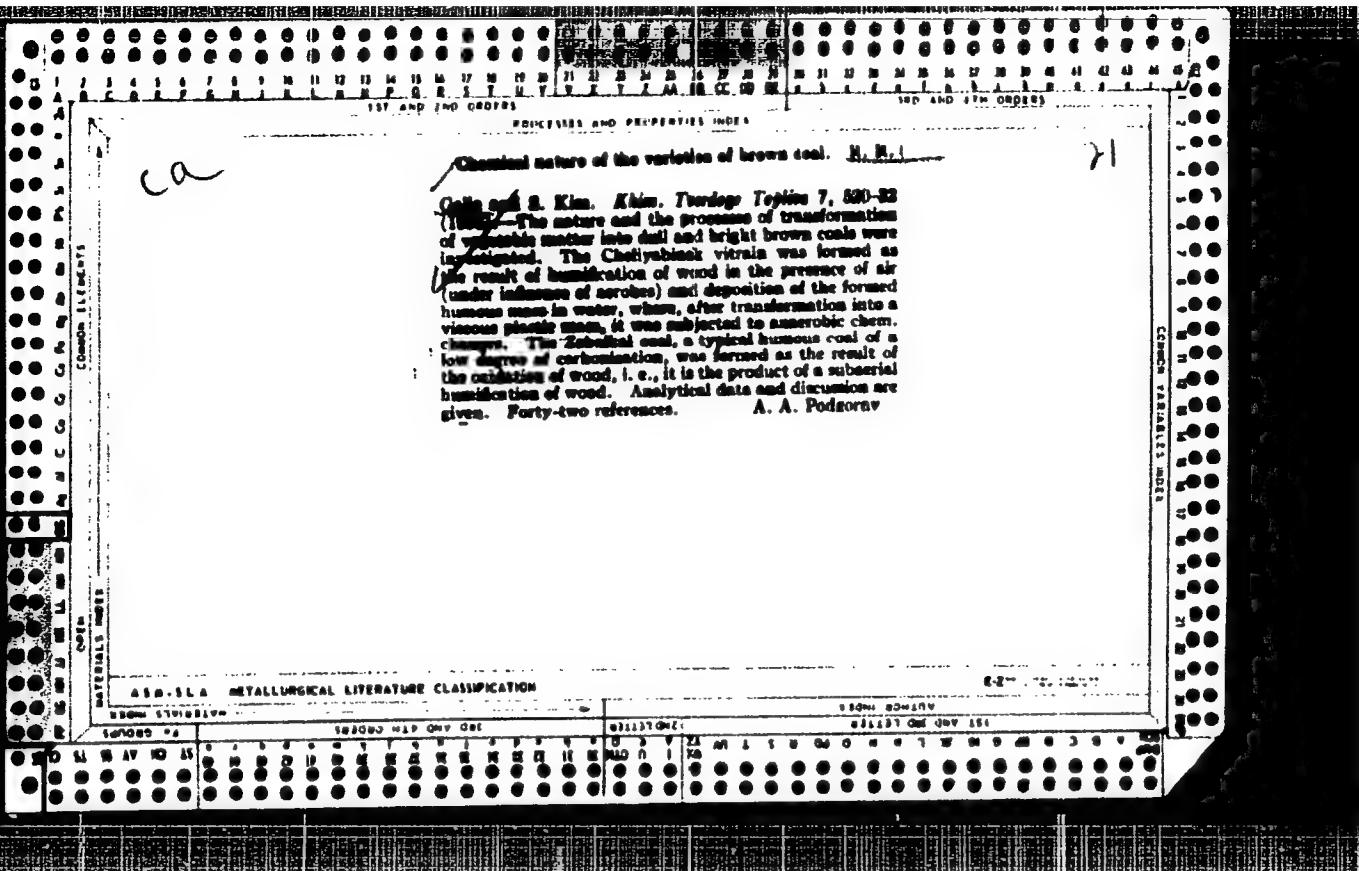
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21

(A)

Investigation of the vitrinite and sapropelite coals of the Tschudn'ill deposit. R. A. Vynet and H. H. Galle. Chem. Tverdogo Uprava SSSR (1954). The brittle black vitrite has a glassy appearance. The sapropelite is brownish, dense and very hard. They contain, resp., H<sub>2</sub>O 9.38, 1.00; ash 2.27, 37.12 and S 1.04, 1.98%. The combustible portions contain volatile substances 31.1, 75.7; C 78.20, 79.42; H 5.65, 8.41; N 1.00, 1.94, and O + N 14.21, 10.22%. On dilution, they gave tar 7.2, 30.2; total H<sub>2</sub>O 17.7, 2.2; ammonia 62.6, 42.7; gas and losses 12.6, 18.8%. The primary gas contained CH<sub>4</sub> 13.3, 17.3; C<sub>2</sub>H<sub>6</sub> 0.2, 12.0; CO 0.6, 7.3; H<sub>2</sub> 10.3, 8.6; CH<sub>3</sub> 47.0, 40.3; and N<sub>2</sub> 12.0, 13.8%. The tar had sp. gr. 1.055, 0.9340; Ringler viscosity —, R<sub>0</sub> 3.18; flash point —, 11.5°; pour point —, -11°; H<sub>2</sub>O 2.05, 0.41%; ash 0.64, 0.01; O<sub>2</sub> 12.17, 84.30; H 8.11, 10.73; N —, 1.03; S —, 0.7%; I no. 99.0, 99.3; phenols 28.78, 4.65; acids 0.19, 0.51; asphaltene 1.95, 1.06; and paraffin (from aqueous) 0.07, 0.63%. A. A. Borshteink





CA

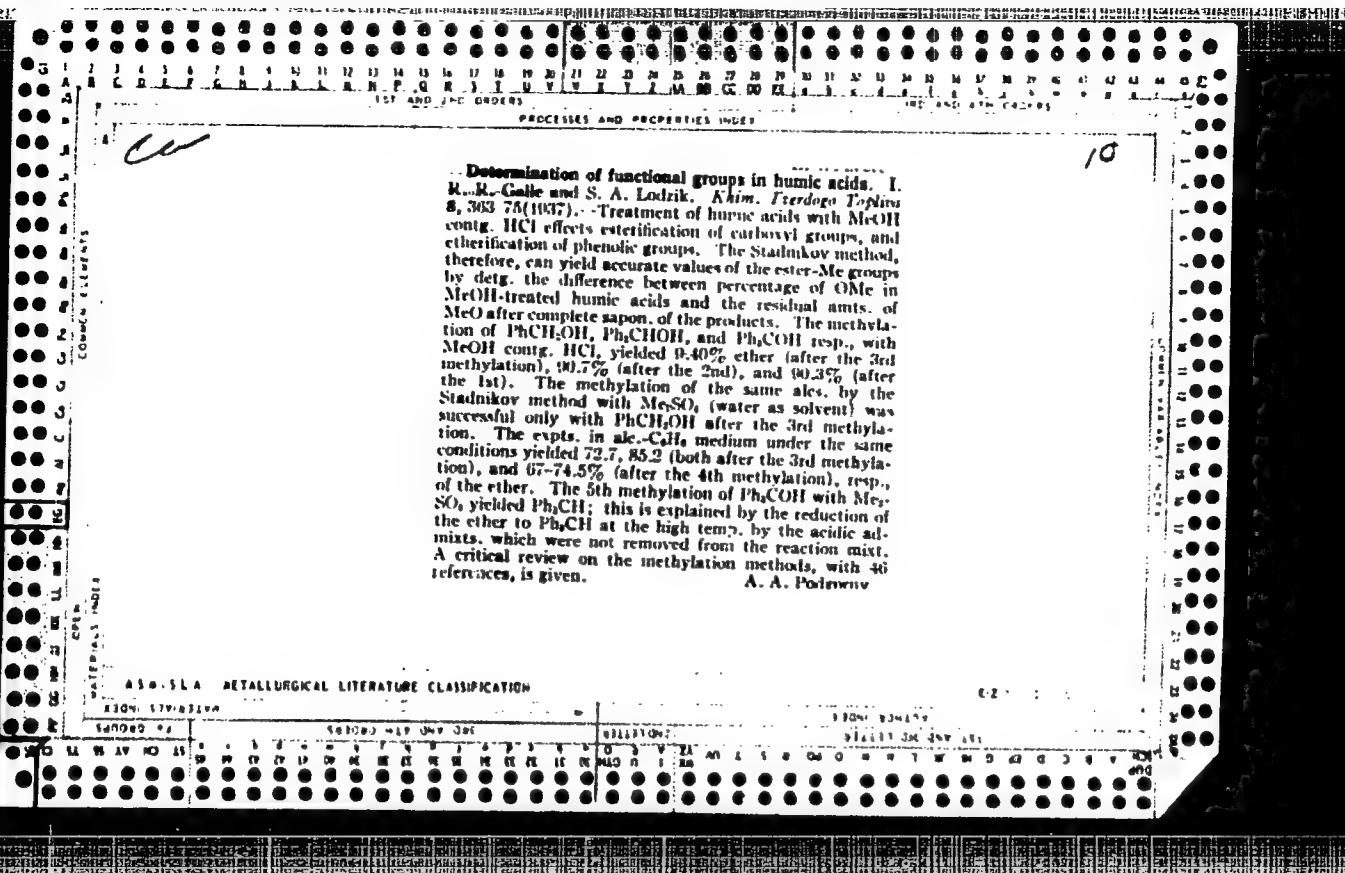
PROCESSES AND PROCESSES

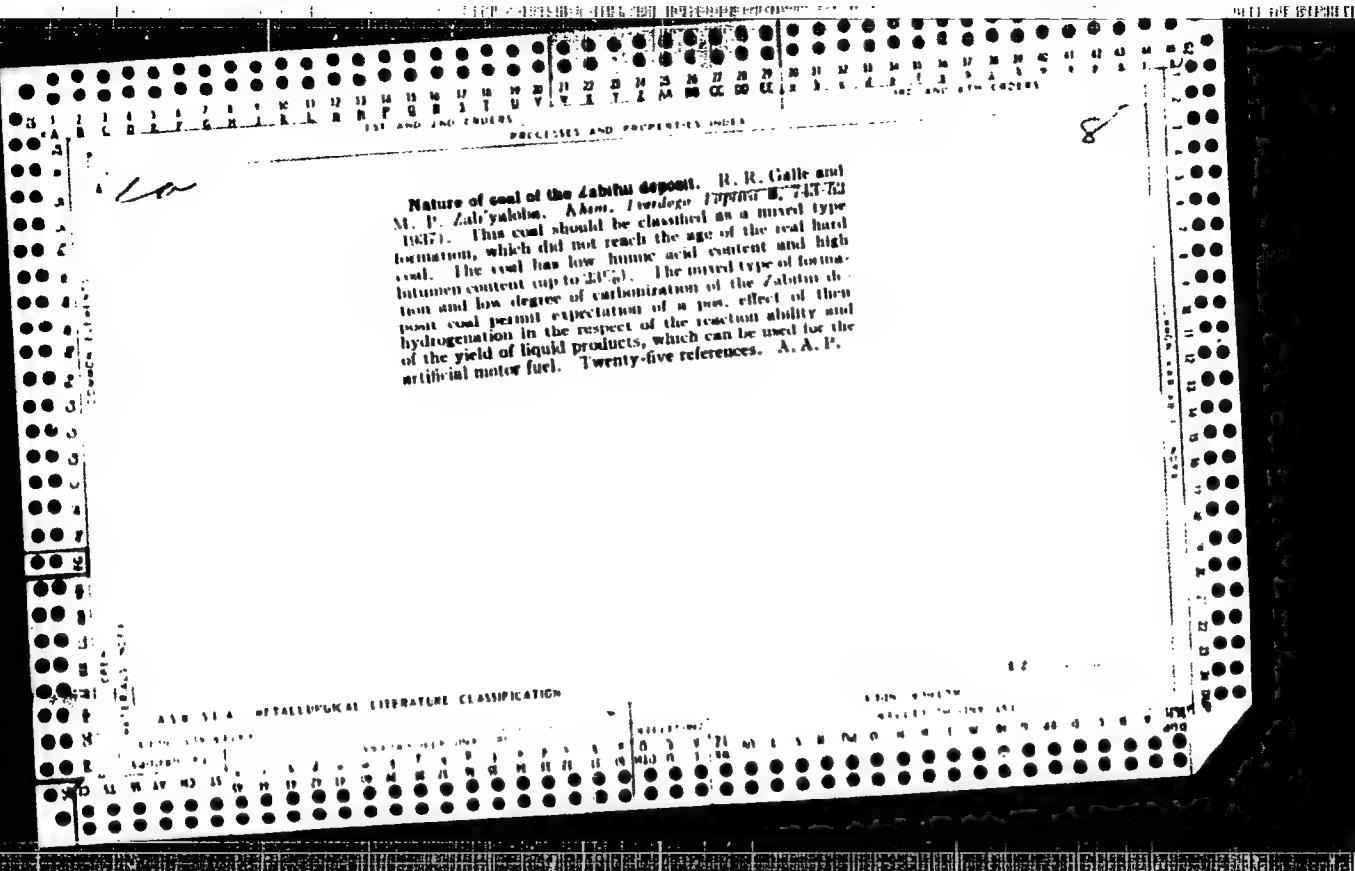
**Chemical characteristics of coal of the Raichikhinsk deposit.** R. A. Vener and R. R. Galle, Khim. i Prog., Toplitsa, 7, 845-73 (1938).—This is a thin brown coal of humous origin. It contains S 0.16-0.49, ash 10.11, moisture 37-40%, and its org. mass contains C 70.71, H 3.6-4.8%, a large amt. of humic acids, and a very small amt. of bitumen sol. in alc.-Cell. Tests in the Fischer aluminum retort yielded 3.4-6.8% primary tar config. phenols 32.04-6.72, carboxylic acids 1.01-0.07, org. bases 0.12-0.33, and neutral substances 60.81-92.80%. The primary gas is not suitable for the synthesis of liquid fuel because of its compn. It has a calorific value of 1500-2000 cal. (calcd.). The semicoke contains moisture 1.55-1.85 and ash 11.37-11.78; the combustible matter contains C 85.81-87.63 and H 3.26-3.10%; the calorific value is 7800-7834 cal. Destructive hydrogenation of this coal in the presence of MoS<sub>2</sub> (1%) catalyst at 400° under a cold pressure of 0.1-1.0 atm. for 18 min. liquifies 89.11-94.79% of the coal and may yield a motor fuel, if the coal is freed from the component rich in fusin. A. A. Podgorny

## 3. ABSTRACT METALLURGICAL LITERATURE CLASSIFICATION

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CIA-RDP86-00513R000614120012-4"





Synthesis of (naphthyl) ketones by means of etherates of titanium tetrachloride. R. R. Gallo. *J. Gen. Chem.* (U. S. S. R.) 8, 402-9 (in English 409) (1939); cf. Goldfarb and Smorgonik, *C. A.* 31, 9013. When 0.1 mol  $C_6H_5Cl$  in 150 ml. of dry  $CaH_2$  was digested in the cold with equimolar  $TiCl_4$  and  $AcCl$  (cf. Stobbe and Lenzner, *C. A.* 35, 2889), it gave considerable resublimation product and unaltered  $C_6H_5Cl$ , and no naphthyl ketone. Under the same conditions  $t\text{-C}_6H_5OMe$  (I) afforded 90%  $\alpha$ -methoxy- $\delta$ -acetonaphthone, bp 102-3°, m. 71-1.4° (80% a.c.), and  $\alpha\text{-C}_6H_5OMe$  (II) gave 92%  $\alpha$ -methoxy- $\beta$ -acetonaphthone, m. 67-6.8°. With  $NaCl$  I gave 90%  $\alpha$ -methoxy- $\delta$ -acetonaphthone, bp 243-5°, m. 82.4-2.7°, and II gave 94%  $\alpha$ -methoxy-1-benzonaphthone, m. 120-1.7°. With  $(COCl)_2$  (III) I gave 100%  $\alpha,\beta$ -dimethoxydiphenyl ketone, m. 231-2-4.6°, while II gave 50%  $\alpha,\beta$ -dimethoxydiphenyl ketone, m. 142.5-3°, and 40%  $\alpha,\beta$ -dimethoxybenzonaphthone, m. 228.5-9°. Thiophene with III gave a Ti-vanung polymer complex. It is insol. in org. solvents, acids and  $NaOH$ , and gives by extn. with fagin about 1 g. of the compnd.  $C_{12}H_8O_3$  m. 88.0, identical with the dithioketone obtained by Thomas and Coudere (*C. A.* 13, 713). *Chem. Blaue*

Chas. Blane

**APPROVED FOR RELEASE: 07/16/2001**

CIA-RDP86-00513R000614120012-4"

**Chemical properties of coals from the Korkin deposits in the Chelyabinsk region.** N. N. Galk and V. S. Zagrebchikov. *Coke and Chem. (U. S. S. R.)* 1939, No. 8, 15-18; *Khim. Referat. Zhur.* 1939, No. 12, 88.—In the Korkin coals, vitrinite is lowest in ash (2.03%), fusain is strongly mineralized (27.83%). Fusain contains 18.38% S; 79.5% of this S is in the form of pyrite. Approx. 1.1% (on the initial wt. of coal) of elementary S is present. Owing to this fact the method for the detn. of org. S must be modified. Humic substances were sept., by treatment of the debituminized vitrinite and clarite with a 2% soln. NaOH. The residue was treated with a 2% q.s. NaOH soln. in an autoclave at 180-200°. Fusain was treated similarly. The clarite varieties consist mainly of typical humic acids. Vitrinite is composed almost entirely of humic acids and neutral humins. The various shiny coals were formed under anaerobic conditions in a medium satd. with water. Fusain was formed under subaerial conditions in a medium situated above water. W. R. H.

**430.3.L4 METALLURGICAL LITERATURE CLASSIFICATION**

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10

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CIA-RDP86-00513R000614120012-4"

Ca

Polymerization of Isobutylene. I. Action of phosphoric acid on a carrier. R. R. Galle and B. N. Pustanovich. *J. Applied Chem. (U.S.S.R.)* 19, 1107-14 (1946) (in Russian).—The catalyst was prepd. by drying birch charcoal of 1.5-3.0 mm. grain size at 100° under 15 min. 3 hrs., mixing with H<sub>3</sub>PO<sub>4</sub> (d. 1.84), decanting the excess acid, heating the impregnated charcoal at 120°, and centrifuging at 3000 r.p.m. 30 min.; the dry contact contained 70.5% H<sub>3</sub>PO<sub>4</sub>. With 60 g. catalyst over a length of 60 cm., at 50°, gaseous isobutylene, prepd. by dehydration of Me-C<sub>2</sub>H<sub>5</sub>OH over Al<sub>2</sub>O<sub>3</sub> at 400-425°, flowing at rates  $r =$  12.4, 24.0, 80.0 l./hr., was polymerized to 100, 90, 80%, resp., that is, considerably faster than over liquid H<sub>3</sub>PO<sub>4</sub>; the activity of the latter, per g. H<sub>3</sub>PO<sub>4</sub>, is only 16.9% of its activity on charcoal; fractionation of the  $r = 12.4$  and  $r = 80.0$  product gave for the fractions b, 96-110° (dimer), 110-140°, 140-178° (trimer), >178°: 42.8, 4.3, 33.4, 19.5 and 45.0, 3.1, 34.7, 17.2%, resp., indicating a slight tendency to increased formation of diisobutylene at higher  $r$ , roughly 6% more at double  $r$ . Shortening of the time of contact by reducing the height of the catalyst column to 4.5 mm. gave (at 50.5°) 7.1, 3.7, 4.5% polymerization at  $r$  8.2, 18.6, 21.2 l./hr., resp.; formation of the dimer is somewhat increased (mean 53%), mainly at the expense of polymers higher than the trimer, the latter remaining fairly const. (mean 31%), also at 100°. N. Thon

10

**Polymerization of Isobutylene. II. Action of acid iron phosphates on a carrier.** R. R. Jallin, B. N. Parfenovich, and R. N. Rosenberg. *J. Applied Chem. (U.S.S.R.)* 19, 1251-8 (1940) (in Russian); *cf. C.A. 41, 4704d.*—Three types of catalysts were prepared: (I)  $\text{Fe}(\text{H}_2\text{PO}_4)_2$ , (light pink rhombic microcrystals), by dissolving 4.5 g.  $\text{Fe}(\text{OH})_3$  in 48%  $\text{H}_3\text{PO}_4$  (d. 1.20) with heating and stirring, then introducing 14.8 g. (equal to the theoretical amt. of  $\text{Fe}(\text{H}_2\text{PO}_4)_2$ ) dry activated C of 1.5-3.0 mm. grain size, heating at 70° 2.5 hrs., filtering, washing with ether, and drying over  $\text{Na}_2\text{O}$  at 60°. This catalyst (in a 10-mm. layer) did have a polymerizing effect at 80-80° (yield of dimer about 10% higher than with  $\text{H}_3\text{PO}_4$  with a fresh catalyst) but proved very unstable due to hydrolysis. Addn. of new  $\text{Fe}(\text{H}_2\text{PO}_4)_2$  on a little C (deposited in ether suspension and evapd.) to the exhausted catalyst raised its activity only temporarily. (II) A catalyst with excess  $\text{H}_3\text{PO}_4$  by introducing 200 g. activated C into 1 l. 16%  $\text{FeCl}_3$ , heating under aspirator vacuum, cooling, treating with excess 25%  $\text{NH}_4\text{OH}$ , filtering, washing to remove all Cl, drying at 100°, and adding to one half the amt. of the carrier, resulting in  $\text{Fe}_2\text{O}_3/\text{P}_2\text{O}_5 = 0.374$ , or approx.  $\text{Fe}_2\text{O}_3 \cdot 2\text{P}_2\text{O}_5 \cdot 10\text{H}_2\text{O} \cdot [\text{Fe}(\text{H}_2\text{PO}_4)_2 \cdot 2\text{H}_2\text{O}]$  (III). A catalyst with a deficit of  $\text{H}_3\text{PO}_4$ , obtained by adding to the other half of the  $\text{Fe}(\text{OH})_3$ , opt. on C, 218 g. 40%  $\text{H}_3\text{PO}_4$ , resulting in  $\text{Fe}_2\text{O}_3/\text{P}_2\text{O}_5 = 0.580$  or approx.  $\text{Fe}_2\text{O}_3 \cdot 2\text{P}_2\text{O}_5 \cdot 8\text{H}_2\text{O} \cdot [\text{Fe}(\text{H}_2\text{PO}_4)_2 \cdot 3\text{H}_2\text{O}]$ . Both II and III were heated at 70° 3 hrs., the excess soln. decanted, the catalyst centrifuged at 3000 r.p.m., washed with ether, and dried *in vacuo* at 50°. Due to suppressed hydrolysis, II proved to be considerably more stable than I; at 80-80° the yield of dimer was about 80% of the total polymerizate; that of the trimer fell to half that given by  $\text{H}_3\text{PO}_4$  but rose to about the same amt. at 100-80°; renewed lowering of the temp. again shifts the product compn. in favor of the dimer. The high activity of the catalyst persisted 118 hrs. (at a rate of flow of about 10 l./hr.) and fell slowly during the following 40 hrs.; at that stage, the catalyst was found to have lost almost all its excess  $\text{H}_3\text{PO}_4$  and became nearly identical with I. Humidification of the gas at 18° (0.0163 g.  $\text{H}_2\text{O}/\text{l.}$ ) resulted in doubling the rate of polymerization without change in the compn. of the product at 80-80° but with a sharp loss in the yield of dimer at 100-80°. Humidification at 80° (0.042 g.  $\text{H}_2\text{O}/\text{l.}$ ) resulted, at 100-80°, in a drastic loss of activity (down to 10%), due evidently to extn. of the protecting layer  $\text{H}_3\text{PO}_4$ . The activity of III was about of the same order as that of exhausted II, giving about 60% dimer. Calcs. of the relative time-space yields, taking pure  $\text{H}_3\text{PO}_4$  (on C) = 100, give for: I 31.4, II 83.0 and 74.0 at 80-80° and 100-80°, resp., III 3.9. The very high figure, 183.0, for II at 100-80° in the presence of 0.0162 g.  $\text{H}_2\text{O}/\text{l.}$  is offset by the rapid destruction of the catalyst. N. Then

**APPROVED FOR RELEASE: 07/16/2001**

CIA-RDP86-00513R000614120012-4"

GALLE, R.R.

Effect of exolusion of the globus pallidus on the vestibular function in man. Vest.otorin. no.4:23-29 '62. (MIRA 1643)

1. Iz neyrokhirurgicheskogo otdeleniya (nauchnyy rukovoditel' - doktor med.nauk I.M. Irger) klinicheskoy ordena Lenina bol'nitsy imeni S.P. Botkina, Moskva.  
(BRAIN-SURGERY) (VESTIBULAR APPARATUS)

*BR*

ACCESSION NR: AR4027234

*8/0299/64/000/002/P013/P013*

SOURCE: RZh. Biologiya, Abs. 2P74

AUTHOR: Galle, R. R.

TITLE: Disturbance of vestibular function in patients with damage to the striopallidal system and its changes after surgical excision of the globus pallidus

CITED SOURCE: Tr. 1-go Mosk. med. in-ta. v. 24, 1963, 266-284

TOPIC TAGS: vestibular function, vestibular disturbance, striopallidal tract, balance, dizziness, nystagmus, parkinsonism, chemopallidectomy

TRANSLATION: A feeling of dizziness was noted in 20 out of 51 patients with Parkinsonism and in 3 of 20 it was significant. In 19 patients, a mild spontaneous nystagmus was uncovered. During the caloric test (60 ml of water at 25C, rotation in a Barany chair), various changes in vestibular excitability were noted, determined, according to the author, by varying durations of illness and degree of injury to the subcortical ganglia. Chemopallidectomy abolished the spontaneous vestibular systems (dizziness and nystagmus) in a majority of patients. Vestibular excitability was increased in the first 7-10 days after the

*Card 1/2*

ACCESSION NR: AR4027234

operation, which the author explains as a result of postoperative trauma (increase in intracranial pressure, cerebral edema). In 10 days to one month after the operation, there was an increase in vestibular excitability on the operated side, and a decrease on the opposite side. In cases in which the operation was not completed, an increase in vestibular excitability on the opposite side was noted. 27 refs.

M. Ioffe

DATE ACQ: 14Feb64

SUB CODE: LS

ENCL: 00

Card 2/2

KNUNYANTS, I.L., glav. red.; BAKHAROVSKIY, R.Ya., zam. glav. red.;  
VASKEVICH, D.N., nauchn. red.; VONSKIY, Ye.V., nauchn.  
red.; GALLE, R.R., nauchn. red.; GODIN, Z.I., nauchn. red.  
MOSTOVENKO, N.P., nauchn. red.; TRUKHANOVA, M.Ye., red.

[Concise chemical encyclopedia] Kratkaya khimicheskaya  
entsiklopediya. Moskva, Sovetskaia Entsiklopediya.  
Vol.4. 1965. 1182 columns. (MIRA 18:7)

GALIE, R.R., kand. med. nauk

Otoneurologic symptoms in cervical osteochondrosis, Trudy 1-ge MM  
38:203-210 '65.  
(MIRA 18:10)

GALLE, T.

Klippel-Feil syndrome. Magy. radiol. 5 no.4:145-150 Nov 1953. (CLML 25:5)

1. Roentgen Department (Head Physician -- Dr. Pal Deak), Peterfy Sandor-  
utcai Hospital-Clinic (Director -- Dr. Jozsef Lendvai).

GALLE T. dr

MISSURA, Tibor, dr.; GALLE, Tibor, dr.

Primary osteoclastoma of the frontal sinus. Magy. radiol. 6  
no.3:124-126 July 54.

1. Peterfy Sandor utcai korhaz rendelo (igazgato-foorvos: Lendvai  
Jozsef dr.) Ful-orrgegeszeti osztalyanak (foorvos: Fleischmann  
Laszlo dr., az orvostudomanyok doktora) es Rontgen-osztalyanak  
(foorvos: Deak Pal, dr.) korlemenye.

(FRONTAL SINUS, neoplasms

giant cell tumor)

(GIANT CELL TUMORS

frontal sinus)

MONGOLIA/GENERAL PROBLEMS

U-4

Abs Jour : Rof Zhur - Biol., No 7, 1958, No 32757

Author : Gallo Tibor

Inst : Not Given

Title : Valvular Tumor in the Transverse Colon.

Orig Pub : Magyar radiol., 1957, 9, No 3, 181-182.

Abstract : No abstract

Card : 1/1

TOTH, Jozsef, dr.; HORVATH, Ferenc, dr.; GALLE, Tibor, dr.

Diagnostic difficulties in a case of metastases of prostatic cancer simulating osteoma. Magy. sebeszet 14 no.2:133-135 Ap '61.

1. A Budapesti Orvostudomanyi Egyetem Urologiai klinikajának (Igazgató: dr. Babics Antal egyet. tanár). A Budapesti Orvostudomanyi Egyetem Röntgenklinikajának (Igazgató: dr. Ratkoczy Nandor egyet. tanár), a XX. ker. Szakorvosi Rendelő Intézet (Igazgató: dr. Galcsik Boldizsár) Röntgen Osztályának (Főorvos: dr. Galle Tibor) közleménye.

(PROSTATE neopl) (OSTEOMA diag)

VOLLENBERGER, A.; GALLE, V.

Stimulating action of ACTH and related polypeptides on the spontaneous rhythmicity of isolated heart muscle cells in vitro. Biul. eksp. biol. i med. 56 no.11:18-23 O [i.e. N] '63. (MIR 17:11)

1. Iz otdeleniya issledovaniya krovoobrashcheniya (zav. - prof. A. Vollenberger) Germanской академии наук, Berlin-Bukh, Germanская Demokratische Republik. Представлена действительным членом АМН СССР В.В. Парином.

GALLER, A.

How we fight fungus disease. Otdel truda i sots.strakh. 4 no.12:21  
D '61.

J. Doverennyy vrach Kemerovskogo oblastnogo soveta profsoyuzov  
g. Kiselevsk, Kemerovskoy oblasti.

(Mycosis)  
(Mining engineering-Hygienic aspects)

GALLER, A. A.; NEKACHALOV, V. Ya., konsul'tant dotsent

Organizing control for decreasing the morbidity from epidermo-phytosis in the coal mines. Vest. derm. i ven. no.2:64-66 '62.  
(MIRA 15:2)

1. Doverennyy vrach oblastnogo soveta profsoyuzov (iz dermatologicheskogo dispensera g. Kiselevska)(for Galler).

(DERMATOMYCOSIS)  
(COAL MINES AND MINING—HYGIENIC ASPECTS)

FILIPPOVA, N.I.; GALLER, A.A.

BP-6 salve caps in fungous diseases of the scalp. Vest.derm.  
i ven. 33 no.3:79 My-Je '59. (MIRA 12:9)

1. Iz Kiselevskogo kozhno-venerologicheskogo dispensera  
Kemerovskoy oblasti.

(SCALP--DISEASES)

GALLER, I.

Reduction of prime cost in industrial production, important factor for increasing the profitability and the standard of living of working people. p. 426

INDUSTRIA TEXTILA, Bucuresti, Vol 6, No. 12, Dec., 1955

SO: East European Accessions List (EEAL) Library of Congress, Vol 5, No. 7, July, 1956

GALLER, L.N., inzh.

Building shore protection features on the Caucasian coast of the  
Black Sea. Transp. stroi. 8 no.9:19-21 S '58. (MIRA:11:10)  
(Black Sea--Shore protection)

DUBEN, Josef; NEUBAUER, Miloslav; GALLEROVA, Blanka za technicke spoluprace  
A. Novotne.

Two cases of herpangina with isolation of a group A Coxsackie virus.  
Cesk. epidem. mikrob. imun 7 no.4:231-234 July 58.

(HERPANGINA, case reports  
isolation of group a Coxsackie virus (Cz))

GALLI, Laszlo

Possibilities of irrigation from wells on the tableland between  
the Danube and the Tisza Rivers. Hidrologiai kozlony 41 no.2:  
89-93 Ap '61.

1. "Hidrologiai Kozlony" szerkeszto bizottsagi tagja.

MELYEPITEST DOMÁNYI SZEMLE  
CIVIL ENGINEERING REVIEW  
Vol. I. - 1961  
No. 1, Jan.

L. Guttin

## Exposing strata formations in large areas for the purpose of collecting data . . . . .

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R000614120012-4"

GALLI, Laszlo

"Site Selection for Industrial Projects, Considering Specially Soil Conditions and Water Availability."

SO: "Civil Engineering Review", Vol. II, No. 2, July 1952, (Hungary).

GALL-L

71. Seepage on flood protection levees. I., Gall  
Pécsügyi Kötetek, 1935, No. 1-2, pp. 107-112.  
11 figs.

On the Hungarian section of the Danube the subsoil of areas lying below flood level is composed of pervious layers of sand and sandy gravel covered with impermeable silt deposits. From the viewpoint of stability and safety against soaking of the levees it would be better to build them of coarse sand or sandy gravel instead of the customary impermeable materials. Along levee sections on the land side where seepages appear at the foot of the levee during a flood it is expedient to strengthen the levee with a banquette built of sandy gravel or sand. If there are any pervious layers under the levee the *design width* of the land strip to be protected must be determined conforming to the dimensions of the pervious and the cover layers, to surface conditions near the levee, and to the flood stage and its duration.

VARDAY, Gyorgy, dr.; BICZOK, Imre; OCSVAR, Rezso; LANTOS, Zoltan; SZIMELY, Karoly; HERENYI, Akos, dr.; FEHER, Gyula; GALLI, Laszlo; BAKOS, Laszlo; CZIGLINA, Vilmos; GABOS, Gyorgy; SZILAGYI, Gyula; RONAI, Andras; KOVACS, Gyorgy; BACHMANN, Alfred; STEGMULLER, Jozsef; RETHATI, Laszlo; NAGY, Zoltan.

Hydrological questions of the construction industry in Hungary.  
Hidrologiai kozlony 36 no.3:169-170 Je'56.

1. "Hidrologiai Kozlony" szerkeszto bizottsagi tagja (for Galli).
2. "Hidrologiai Kozlony" felelos szerkesztoje (for Kovacs).

GALLI, Laszlo

Calculation of seepage under hydraulic constructions in layered soils by means of the approximate method. Vizugyi kozl no.3:  
355-392 '59.

CSAJAGHY, Gabor; BOZSONY, Denes; PICHLER, Janos; KASSAI, Ferenc;  
GYORGY, Istvan; SZABO, Pal Zoltan; DEVENY, Istvar (Szeged);  
KIRALY, Lajos (Miskolc); ZIEGLER, Karoly; PAPP, Szilard;  
SCHMIDT, Eligius Robert; GALLI, Laszlo; VAJDA, Jozsef;  
RONAI, Andras; ILLES, Gyorgu; OLLOS, Geza; FINALY, Lajos;  
MOSONYI, Emil; PAPP, Ferenc

Minutes of the December 19, 1958 general meeting arranged by  
the Hungarian Hydrological Society, Hidrologiai kozlony .39  
no.5:39A 401-404 0 '59.

1."Hidrologiai Kozlony" szerkeszto bizottsagi tagja (for  
Csajaghy, Gyorgy, Szilard Papp, Ferenc Papp, Schmidt and  
Galli). 2. Orszagos Vizugyi Foigazgatosag (for Ziegler).

GALLI, Laszlo, okleveles mernok

Computation of seepage under engineering structures; a reply  
to Imre V. Nagy's remark in no.2,1961 of "Vizugyi Kozlemenek."  
Vizugyi kozl no.4: 500-504 '61.

1. Vizepitesi Tervezo Vallalat fohidrologusa, Budapest.

GALLI, Laszlo, dr.

Application of water household investigations in hydrogeology.  
Hidrologiai kozlony 42 no.2:105-107 Ap '62.

l. Vizugyi Tervezo Iroda, Budapest; "Hidrologiai Kozlony"  
szerkeszto bizottsagi tagja.

GALLI, Laszlo

Problems of small water reservoirs in Hungary. Hidrologiai  
kozlony 45 no.1:1-12, Ja '65.

1. Water Resources Planning Office, Budapest.

GALLI, Lorant; SZTANOJEVITS, Anna

Malignant juxtapapillary melanoma of the choroid. Szemeszet 99 no.4:  
247-251 D '62.

1. A Szegedi Orvostudomanyi Egyetem Szemklinikajának (Igazgató: Kukan  
Ferenc egyetemi tanár, as orvostudományok kandidátusa) közleménye.  
(CHOROID NEOPLASMS) (MELANOMA)

GALLI, Lorant

Hirudin and Pelantan in the treatment of retinal vein thrombosis.  
Szemeszet 100 no.3:162-169 S '63.

1. A Szegedi Orvostudomanyi Egyetem Szemklinikajának (Igazgató:  
Kukan Ferenc egyetemi tanár) közleménye.  
(RETINAL VESSELS) (HIRUDIN) (COUMARINS)  
(VISION TESTS) (STATISTICS) (THROMBOSIS)

GALLI, Lorant

GALLI, Lorant

The significance of tuberculous hemagglutination test for  
ophthalmological diagnosis. Szemeszet 91 no.2:55-65 Apr 54.

1. A szegedi Orvostudomanyi Szemklinikajának köszönnye. (Igazgató:  
Kukan Ferenc egyetemi tanár, az orvostudományok kandidátusa.)  
(TUBERCULOSIS, OCULAR, diag.  
Middlebrook-Dubos reaction)  
(HEMAGGLUTINATION  
Middlebrook-Dubos reaction in ocular tuberc.)

GALLI, Lorant; NAGY, Marta

Intravitreal hemolysis. Szemeszet 100 no. 2:76-84 Je '63

1. A Szegedi Orrostudomanyi Egyetem Szemklinikajának (I. gazgató  
Kukan Ferenc egyetemi tanár) közleménye.  
(VITREOUS BODY) (HEMOLYSIS) (HYALURONIDASE)  
(SAPONINS) (ULTRASONICS)

Gallia F. Oddeleni pro vyzkum a diagnostiku virovych naka, Statni zdravotni ustav a odbor  
pro mikrobiologii a epidemiologii, Praha. Kotazce laboratorni diagnostiky poliomyslitidy  
Laboratory methods in connection with the diagnosis of poliomyelitis Casopis lekaru  
ceskych, Prague 1949, 88/44 (1271-1274) A review.

Wolf - Prague

SO: Medical Microbiology & Hygiene Section IV, Vol. 3, No. 7-12

GALLIA, F.; JAROS, Z.; HAVLIK, O.; RAMPAS, J.; KOLMAN, J.

Paittacosis in Czechoslovakia. Cas.lek.cesk. 89 no.17:473-478  
28 Ap '50. (CMLL 19:2)

1. Microbiological and Epidemiological Branch (Head -- Docent  
K.Raska, M.D.), State Institute of Health, and Infectious  
Diseases Department (Head -- Prof. J.Prochazka, M.D.), State  
District Hospital in Bulovce.

GALLIA, M.

Czechoslovakia

CA:47:11771-772

"Purification and utilization of sugar-factory waste waters."

Listy Cukrovar. 66, 223-4 (1949-50); Sugar Ind. Abstr. 12, 174 (1950)

GALLIA, T.

Some problems of cutting microgroove records. p. 8. Vol. 2, No. 1 Jan. 1956  
KEP ES HANGTECHNIKA. Budapest, Hungary,

SOURCE: East European List. (EEAL) Library of Congress Vol. 6, No. 1  
January 1956.

GAWLIK.

**HUNG**

Dr. Model tests on a bridge

Gy. Hayati, I. Gálhidy, J. Mihály

(Hungarian Scientific Academy)

1933 No. 8 pp. 229-233

100, 12 (1933)

The article deals in detail with the model of recently built 178 m long monolithic bridge with a 100 m span. The construction of the model, method of loading and the extensometer equipment are described. The principal problem to be solved in designing the bridge was to determine the internal stresses due to wind forces. Stresses corresponding to the wind forces were transmitted to the steel model through horizontal wires hung on the web structure. The wires were stressed by weights over rollers. The internal strains resulting by the action of these loads were measured by gauges arranged at appropriate points of the model. The determination of moments and resultant forces by means of measurement and the evaluation of their results are described. It is shown that the usual methods of approximating calculation yield results which greatly differ from the real internal stresses. However, the data obtained in the course of model analysis can be verified with good approximation by a more precise method of calculation by iteration.

*Gy. Hayati*

GALLIK, Istvan, okleveles mernok, a miszaki tudomanyok kandidatusa

An experimental bridge made of orthotropic slabs.  
Melyepiteseti szemle 12 no.12:531-537 D '62.

1. Utugyi Kutato Intezet tudomanyos fomunkatarsa.

DARVAS, Endre, okleveles mernok; GALLIK, Istvan, okleveles mernok, a muszaki tudomanyok kandidatusa

An account of the 3d International Conference on Welding at Halle and the study trip. Melyepitestud szemle 12 no.10, 474-480 O '62.

1. Ut-Vasutervezo Vallalat iranyito tervezosoje (for Darvas). 2. Utugyi Kutato Intezet tudomanyos munkatarsa (for Gallik).

GALLIK, Istvan, dr., a műszaki tudományok kandidátusa

New prescriptions in the draft regulations on welded steel  
constructions. Gep 16 no.7:249-255 Jl '64.

1. Road Research Institute, Budapest.

TURUTA, N.U., kand. tekhn. nauk; GALLIMULIN, A.T., kand. tekhn. nauk;  
KRASNopol'skiy, A.A., kand. tekhn. nauk; ONISHCHENKO, V.Ya.,  
inzh.; DANILOV, N.M., inzh.; KARPINSKIY, A.V., inzh.; PANCHENKO,  
D.F., inzh.

Effectiveness of blasting systems in flux limestone quarries.  
Vzryv. delo no. 57/14:181-185 '65. (MIRA 18:11)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy  
institut ugod'noy, rudnoy, neftyanoy i gazovoy promyshlennosti  
UkrSSR i Dokuchayevskiy flyusc-dolomitnyy kombinat.